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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,349	03/26/2004	Pieter Theodorus Aquarius	VER-179XX	8227

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WEINGARTEN, SCHURGIN, GAGNEBIN & LEOVICI LLP  
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BOSTON, MA 02109

EXAMINER
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LOPEZ, MICHELLE

ART UNIT	PAPER NUMBER
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3721

MAIL DATE	DELIVERY MODE
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10/23/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/810,349	<b>Applicant(s)</b> AQUARIUS, PIETER THEODORUS	
	<b>Examiner</b> Michelle Lopez	<b>Art Unit</b> 3721	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8,10,11,13 and 15-23 is/are pending in the application.
- 4a) Of the above claim(s) 16-18 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8,10-11,13,15,19-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

1. This action is in response to the amendment filed on 6/30/09.
2. Claims 9, 12, and 14 are canceled.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8, 10-11, 13, 15, and 19-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the last three lines of claim 1, the limitation of “the drive being adapted to sense ... by sensing a weight change” is functional and afforded light weight because it is predicated on a future act. Furthermore, the functional language is not supported by sufficient structure to perform the sensing of a weight change. Note that the functional limitation does not positively recite any structure and/or device physically related to said drive in order to perform the sensing function, neither describe with respect to what is said weight change related to. Clarification is required.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1, 5, 10-11, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fallas (USPN 4,864,801) in view of Leibetseder (USPN 4,805,379).

Fallas disclose an apparatus for loading containers with bags comprising a feed conveyor assembly (24); a loading unit (60); control means (not shown numerically) for moving a layer of bags in the loading unit (as shown in col. 5, lines 60-64), the layer having dimensions substantially corresponding to at least one bottom dimension of a container (14) to be loaded; wherein the loading unit includes a holder (66) which is movable up and down (see col. 5; lines 38-43), but does not specifically disclose wherein the holder being sized to be substantially fittingly receivable in the container to be loaded, wherein the control means is adapted to controls the loading unit to place the layer by moving the holder down into the container to be loaded, and wherein during downward movement into the container, the holder is partly carried by at least one pressure-controlled air cylinder and partly carried by a drive controlling a vertical position of the holder, the drive being adapted to sense the bottom of the container or a previously loaded layer.

Leibetseder discloses an apparatus for packaging stacks of layers comprising a loading unit (24) having a holder (27) being sized to be substantially fittingly receivable in a container to be loaded (see fig. 4); control means, including at least a sensor, which controls the loading unit to place a layer of objects by moving the holder down into the container (see col. 5, lines 7-16), and wherein the holder is partly carried in a downward movement towards the container by one pressure controlled air cylinder (35) and is partly carried by a drive (i.e. piston actuator 29) controlling a vertical position of the holder (i.e. controlling the positioning of the holder within the container while supporting the loaded layer thereon, and deflecting and pulling it out when a

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desired position on the container has been reached, as shown in col. 4, lines 66-68, and col. 5, lines 1-3), and wherein the drive (29) is adapted to sense the bottom of the container or a previously loaded layer for the purpose of automatically packaging stacks of layers in such a manner that successive layers main contain equal numbers of and are handled gently during the packaging operation (as shown in col. 2, lines 8-16). Note that the limitation "the drive being adapted to sense ..." does not require a device, e.g. a sensor, to be physically provided at said drive. Leibetseder's drive 29 is controlled by a programmed controller (as shown in col. 5, lines 50-63) and is mechanically related to the cylinder 35, thereby, to sensors provided at said cylinder (as shown in col. 5, lines 7-16). Therefore, it would have been obvious to one having ordinary skill in the art to have substituted the holder of Fallas for the holder of Leibetseder having a pressure-controlled air cylinder (35) and a drive (29) in order to control the downward and upward movement of the holder and automatically packaging stacks of layers in a container in a controlled manner.

With respect to the last three lines of claim 1, while Leibetseder teaches the use of a programmed controlled and sensors to control the operation of the piston actuators (35, 29) and loading unit (24, 27; as shown in col. 5, lines 7-16 and 61-68), Leibetseder does not specifically disclose the operation of sensing a weight change. However, the use of weight sensors is well known in the art and the Examiner takes Official Notice that their use is common knowledge in the packaging art, for example, for automation purposes. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a weigh sensor, rather than reed relays or lengths measuring means, in the device of the combination to efficiently and automatically control the operation of the piston actuators and holder.

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With respect to claims 5 and 15, Fallas also discloses a stop (26), a first conveying direction, a transfer device (40), a further conveying path with a second conveying direction perpendicular to the first conveying direction and a conveying system for containers (as shown in fig. 1).

With respect to claims 10-11, while Fallas discloses a bottom of the holder formed by a curtain, wherein the curtain has two curtain parts which are movable from a closed position away from each other to an open position, but fails to disclose wherein said curtain is a flexible curtain. Leibetseder shows wherein the bottom of the holder is a flexible curtain capable of being deflected around a corner for the purpose of facilitating the upward movement of the holder and the filling of the load into the container (as shown in col. 4, lines 66-68; and col. 5, lines 1-3). In view of Leibetseder, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provide Fallas curtain as a flexible curtain as taught by Leibetseder in order to facilitate the upward movement of the holder and filling of the load into the container.

5. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fallas (USPN 4,864,801) in view of Leibetseder (USPN 4,805,379), as apply above in claim 1, and further in view of Focke (USPN 5,430,994).

The modified invention of Fallas, further discloses a first rotating system (30) and a second rotating system (22) one behind the other (as shown in Fallas' figs. 2A-2E), but does not disclose wherein each rotating system comprises two parallel running conveyor belts which are drivable at different speeds. Focke teaches the concept of a feeding conveyor having two rotating

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system (17,16) arranged one behind the other, wherein said rotating systems comprise two parallel running conveyor belts (18,19) and (35,43) which are drivable at different speeds for the purpose of feeding bags to a packer for the packing of packs into containers in groups or layers. It would have been obvious to have provided the modified invention of Fallas further having a rotating system with two parallel running conveyors as taught by Focke in order to pack packs of bags into containers in groups or layers.

With respect to claims 3 and 4, Focke also teaches the concept of rotating a bag through an angle of 45 degrees via the inclination of the first rotating system (17) and rotating the bag through an additional angle of 45 degrees on the second rotating system as shown in Figs. 3-6, and control signals via (46); and the conveyor (17) is arranged so as to be movable up and down (claim 4).

6. Claims 6-8, 13, 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fallas (USPN 4,864,801) in view of Leibetseder (USPN 4,805,379), as apply in claim 1 above, and further in view of Fallas (USPN 5,123,231).

Fallas' 801 discloses a collecting belt at conveyor (24) and folding side plate (as shown in figs. 2A-2E), but does not specifically disclose a retracting belt movable as a whole in the second direction. Fallas'231 teaches the concept of a collecting belt and a retracting belt (100), i.e. oscillating conveyor, wherein such retracting belt is movable as a whole in a second direction as shown in col. 4; lines 9-53. Therefore, it would have been obvious to one having ordinary skill in the art to provide Fallas'801 modified invention and further having a feeding conveyor assembly as taught by Fallas'231 to selectively depositing product groups into receptacles.

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With respect to claims 8 and 20, Fallas' 801 also disclose wherein a discharge end at the vicinity of (26) is arranged to be movable up and down.

With respect to claim 13, Fallas'231 also teaches the concept of sensors as proximity switches (222, 224).

7. Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fallas (USPN 4,864,801) in view of Leibetseder (USPN 4,805,379), and further in view of Focke (USPN 5,430,994) and Fallas (USPN 5,123,231) as discussed above in paragraphs 5 and 6.

#### ***Response to Arguments***

8. Applicant's arguments, filed 6/30/09, with respect to the rejection under 35 U.S.C. 112, 1<sup>st</sup> paragraph, have been fully considered and are persuasive. Accordingly, the rejection under 35 U.S.C. 112, 1<sup>st</sup> paragraph, has been withdrawn. However, upon further considerations claims 1-8, 10-11, 13, 15, and 19-22 have been rejected under 35 U.S.C. 112, second paragraph, as set forth in paragraph 3 above.

9. Applicant's arguments filed 6/30/09 have been fully considered but they are not persuasive. Applicant contends that Leibetseder fails to teach that the holder is partially carried by a pressure controlled air cylinder and partly carried by a drive that controls the vertical position of the holder. However, examiner asserts that claims are given their broadest reasonable interpretation consistent with the specification. In this instance, it is the examiner position that Leibetseder does show wherein the holder is partially carried by a pressure controlled air cylinder 35 and by a drive 29. Note that drive 29, which operation is controlled by a programmed controller, does partly carry the loaded layer of the holder during a downward movement of it



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and controls the vertical position of the holder by supporting the load thereon until a desired and/or determined position on the container has been reached, thereafter deflects and pull out the holder.

10. Applicant also contends that Leibetseder fails to teach that the drive 29 is adapted to sense the bottom of the container or a previously loaded layer. However, examiner asserts that claims are given their broadest reasonable interpretation consistent with the specification. In this instance, it is noted that the limitation "the drive being adapted to sense ..." does not require a device, e.g. a sensor, been physically provided at said drive. Leibetseder's drive 29 is controlled by a programmed controller (as shown in col. 5, lines 50-63) and is mechanically related to the cylinder 35, thereby, to sensors provided at said cylinder (as shown in col. 5, lines 7-16).

For the reasons above, the grounds of rejection are deemed proper.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the attached PTO-892 for related art.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Lopez whose telephone number is 571-272-4464. The examiner can normally be reached on Monday - Thursday: 8:00 am - 6:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle Lopez/  
Examiner, Art Unit 3721

/Rinaldi I Rada/  
Supervisory Patent Examiner, Art Unit 3721